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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,695	03/21/2007	David C. Greenspan	13791-23	6560
45473	7590	05/26/2010		
BRINKS, HOFER, GILSON & LIONE			EXAMINER	
P.O. BOX 1340			SUTTON, DARRYL C	
MORRISVILLE, NC 27560				
			ART UNIT	PAPER NUMBER
			1612	
			MAIL DATE	DELIVERY MODE
			05/26/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,695	GREENSPAN ET AL.	
	Examiner	Art Unit	
	DARRYL C. SUTTON	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/26/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed 04/26/2010. No new claims have been added. Claims 19-34 are cancelled.

Applicant's arguments filed 04/26/2010 have been fully considered. Rejections and/or objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

Claim Rejections - 35 USC § 112

Claims 1-18 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant's argue that the specific definitions included in the specification of the phrases "preventing plaque," "preventing plaque buildup," and "preventing gingivitis" of the instant claims are supported and enabled by Example 2 of the instant specification.

The Examiner disagrees.

The data provided by Applicant does not support enablement for prevention of plaque, plaque buildup or gingivitis. There are numerous variables that could account for the data provided. For example, differences between the control and test groups in diet, brushing habits, i.e. time and frequency of brushing, and bioactivity in the mouth of individuals could reasonably account for the differences in the data between the groups. Accordingly, Applicants have not shown enablement for a method of plaque, plaque buildup and gingivitis prevention.

Claim Rejections - 35 USC § 103

Claims 1-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gates et al. (US 5,882,360) in view of Litkowski et al. (WO 99/13852).

Applicants argue Gates provides no disclosure regarding bioactive glass. Litkowski provides on disclosure regarding the use of bioactive glass to prevent or reduce plaque, plaque-buildup and/or gingivitis. Rather Litkowski is directed solely to teeth whitening including bleaching, lightening or removing stain from teeth. As such, neither Gates, Litkowski, nor the combination thereof discloses or reasonably suggests the claimed method.

The Examiner disagrees.

Since the rejection is a 103 obviousness rejection, Gates et al. is not required to teach each and every limitation of the instant claims. As cited in the Non-final office action, Gates et al. teaches a dentifrice comprised of dentally acceptable abrasives, see page 7. Further, Gates et al. provides a list of examples of suitable abrasives, including silica, plastic particles, alumina, calcium carbonate and calcium pyrophosphate (column 2, lines 27-31). Litkowski et al. teaches the incorporation of abrasives such as silica, plastic particles, alumina, calcium carbonate and calcium pyrophosphate; and that the bioactive glass can replace all, some or none of the abrasives (page 4, lines 21-29). Accordingly, it would have been obvious to modify the composition of Gates et al. to include the bioactive glass of Litkowski et al. based on its recognized suitability for its intended use as both a whitening agent and as an abrasive, as cited in the Non-final office action, see pages 8 and 9. As cited by the Examiner on page 10 of the Non-final office action, the use of bioactive glass for the reduction of viability of detrimental oral

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microorganisms and for prevention of dental caries and/or gingivitis was known in the art at the time of the invention. One of ordinary skill in the art would reasonably expect the bioactive glass to exhibit any and all of the activities that are based on its structure when used in the composition suggested by combining Gates et al. and Litkowski et al. Accordingly, one of ordinary skill would reasonably expect that the composition and methods suggested by combining Gates et al. and Litkowski et al. to be successful in whitening teeth and also at reducing the viability of detrimental oral microorganisms and preventing dental caries and/or gingivitis.

No claims are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darryl C. Sutton whose telephone number is (571)270-3286. The examiner can normally be reached on M-Th from 7:30AM to 5:00PM EST or on Fr from 7:30AM to 4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass, can be reached at (571)272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Darryl C Sutton/
Examiner, Art Unit 1612

/Frederick Krass/
Supervisory Patent Examiner, Art Unit 1612